

What is claimed is:

1. A mold for molding a tire, comprising:

at least two sub-molds being capable of forming a predetermined form as a whole when used for molding a tire,

5 characterized in that said mold is equipped with said at least two sub-molds each of which has a plural number of air removal apertures for discharging air from blockades formed between said green tire and sub-molds when a green tire is pressed on respective surfaces of said sub-molds during tire molding, and a plurality of ventlids; each of which has a lid mechanism; and said lid mechanism being made of a flexible, and chemically inactive material without fusing with said green tire, and being capable of using repeatedly at a temperature of 100-200 °C, discharging air from blockades with keeping an open state by spring up until said green tire contacts an upper portion of the mold when said green tire is pressed on respective surfaces of said sub-molds during tire molding, continuing to discharge air while reducing degree of its spring up during a period from a time when said green tire contacts said upper portion to a time when it reaches the surface of said sub-molds, and preventing a green tire from flowing out of the ventlids by forming a closed state where the ventlids are intimately contact with said green tire by dissolving its springing up when said green tire reaches the surfaces of said sub-molds.

20 25 2. A mold for molding a tire according to Claim 1,

wherein said ventlid is a flexible plate member and the lid mechanism of said ventlid passes through the direction of

the thickness of said ventlid; said ventlid being formed by bending upwardly at a predetermined angle a cut portion cut along with a baseline formed by a straight line linking a starting point and an end point both of which are a starting point(s) and an end point(s) of one or more straight or curved cuts and do not coincide each other.

5. 3. A mold for molding a tire according to Claim 1,

wherein said lid mechanism is disposed with a means of positioning to prevent further pressing downwards after formation of a closed state where the ventlids are intimately contact with said green tire by dissolving its springing up at a time when said green tire reaches the surfaces of said sub-molds.

10. 4. A mold for molding a tire according to Claim 3,

wherein said means of positioning is a positioning pin disposed in a standing form in direction of the central axis of said venthole so as to make an upper portion thereof contact intimately with said lid mechanism in a closed state by means of a support member provided in said venthole.

15. 5. A mold for molding a tire according to Claim 3,

wherein said means of positioning is a positioning structure where diameter of said venthole is set to be small so as to make a leading edge of said lid mechanism contact with an upper portion of the peripheral wall of said venthole when said lid mechanism is a closed state.

20. 6. A mold for molding a tire according to Claim 1,

wherein said ventlid is a flexible plate member, and said

lid mechanism of said ventlid is formed by bending at a predetermined angle cut portions which are cut along with a baseline formed from one or more cuts which are formed from one or more continuous or non-continuous straight or curved lines.

5 7. A mold for molding a tire according to Claim 6,

wherein said ventlid is fixed in a vent tube by fixing a weld side by using as a boundary said cuts formed through direction of the thickness at a predetermined location of said sub-molds, and said vent tube where said ventlid is fixed is disposed in said venthole.

10 8. A mold for molding a tire according to Claim 6,

wherein said ventlid is directly fixed by fixing a weld side by using as a boundary said cuts formed with passing through direction of the thickness at a predetermined location of said sub-molds.

15 9. A mold for molding a tire according to Claim 1,

wherein said ventlid is made of a lens-shaped flexible plate member where two circles or ellipses are lay in a line, and said lid mechanism of said ventlid is formed by bending at a predetermined angle as a baseline of a joint portion where the two aforementioned circles or ellipses are lay in a line.

20 10. A mold for molding a tire according to Claim 9,

wherein said ventlid is fixed in a vent tube at a predetermined location with respect to one plate member of said plate members that are bent; said vent tube where said ventlid is fixed being disposed in said venthole.

25 11. A mold for molding a tire according to Claim 9,

wherein said ventlid is directly fixed by fixing one plate member among said bent plate members at its predetermined location to a predetermined location of said sub-molds.

12. A mold for molding a tire according to Claim 9,

5 wherein said ventlid is made of a keyhole-shaped flexible plate member where a circle, ellipsis or shell-shape, and rectangular shape are lay in a line, and said lid mechanism of said ventlid is formed by bending the flexible plate at a predetermined angle as a baseline a line formed by said circle, ellipsis or shell-shape and said rectangular shape or a straight line positioned at the proximity of said line.

13. A mold for molding a tire according to Claim 12,

10 wherein said ventlid is fixed by embedding directly said rectangular plate member among said bent plate members into a predetermined location of said sub-molds to fix .

15. A mold for molding a tire according to Claim 1,

20 wherein said ventlid is fixed to said sub-molds by fixing said rectangular plate member among said bent plate members at its predetermined location to sipe blades disposed in predetermined locations of said sub-molds.

25 15. A mold for molding a tire according to Claim 1,

wherein said ventlid is made of a flexible plate member whose shape is composed of a shape corresponding to design of a shape of the periphery of a tire and a rectangular shape in series, and said lid mechanism of said ventlid is formed by bending the flexible plate at a predetermined angle using as a baseline a portion where the design of the shape of the

periphery of a tire and a rectangular shape are lay in a line.

16. A mold for molding a tire according to Claim 15,

wherein said ventlid is fixed to a vent tube at a predetermined location of said rectangular plate member among
5 said bent plate members, and said vent tube to which said ventlid is fixed is housed in said venthole.

17. A mold for molding a tire according to Claim 15,

wherein said ventlid is a ventlid in which a predetermined location of said rectangular plate member among said bent plate members is directly fixed in a predetermined location of said
10 sub-molds.

18. A mold for molding a tire according to Claim 6,

wherein a plate member capable of opening and closing among said bent plate members is made of a plate member having a surface shape corresponding to the surface shape of said
15 sub-molds.

19. A mold for molding a tire according to Claim 18,

wherein a plate member capable of opening and closing among said bent plate members is a plate member to which a shaped
20 component having a surface shape corresponding to the surface shape of said sub-molds is fixed.

20. A mold for molding a tire according to Claim 1,

wherein said ventlid is made of a silicone elastomer or a fluorocarbon elastomer.